PUBLIC HEALTH REPORT

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DESPITE CALIFORNIA'S RAPID population increases, planning and development of water resources have met the pressing demands for domestic water supplies—a truly remarkable accomplishment. An equally remarkable accomplishment has been the continued safety of the water delivered to the bulk of California's population.

Further, the public health problems to be dealt with have multiplied out of proportion to the population spiral. This population acceleration, coupled with growing urbanization and increasing recreational activities, has created problems of producing and delivering a domestic water supply of high quality. In addition, public expectations for good quality water have increased significantly.

Surface water sources are being exposed to more potential sewage hazards owing to increased recreational activities and increased population. Of active concern to the State Department of Public Health are proposed small community sewage disposal projects in the upper watershed areas, heavy recreational activities on mountain streams and lakes, recreation on water supply reservoirs and enormous construction activities throughout the mountain areas.

In other areas of the state, urban development is encroaching upon local surface water sources and upon the thousands of domestic water wells located in highly urbanized areas. In addition to the encroachment upon surface water sources, ground water supplies are in a state of rapid change brought about by increasing water demands, lowering of ground water basins and recharge practices.

The staff of the department's Bureau of Sanitary Engineering has been alert to these problems and has been actively engaged in promoting high quality, safe and potable water supplies for Californians.

Urgent problems which confront all of the department's environmental health units include:

1. The rapid proliferation of sewage reclamation water projects, some of which have serious implications with regard to the safety of ground water sources.

- 2. The presence of chironomid larvae, nematodes, chronic high coliform counts, mineral content and taste and odor problems in four of the state's major water systems.
- 3. The transition of a substantial number of irrigation systems to domestic service.
- 4. The accidental spraying of pesticides over the raw water basins of domestic water systems.

Californians are served domestic water by some one thousand large water systems and more than four thousand small systems, in addition to numerous individual water sources that serve restaurants, resorts, parks, roadside establishments and isolated industrial premises.

Of particular concern to the department are the small water systems, many of which are becoming overtaxed by the demands of burgeoning residential populations, and which must expand their facilities.

The expansion of small systems often results in the development of problems which are difficult to correct and often stem from the lack of financial backing and capital investment.

Typical of the problems are water mains too small to provide adequate pressure, lack of sufficient water sources to meet demand, treatment units operating at excessive rates, dilapidated or nearly worn out equipment and poorly trained operating personnel.

The Bureau of Sanitary Engineering has joined with local health departments to upgrade the small water systems by providing consultation services and by conducting training programs for system personnel.

In all phases of water supply-source, treatment, and distribution-more intense problems are appearing. The Public Health Department has stepped up its activities to keep abreast of water quality needs. Thus far, we have been able to maintain a reasonably high degree of safety. Our efforts to maintain higher water quality standards have been accelerated, and programs for the continuance of surveillance to improve the more than five thousand water systems which serve the population have high departmental interest and priority.